Evaluation Working Group Webinar

An Overview to Evaluations in Health and Social Care
Understanding the impact of your work

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Norwich Medical School, University of East Anglia

Dr Yannis Pappas, Reader & Director of Research
Centre for Health Service Organisation and Delivery, Institute for Health Research, University of Bedfordshire

24th May 2022
10:00 – 11:00
Agenda

An Overview to Evaluations in Health and Social Care
Understanding the impact of your work

Tuesday 24th May 2022 10.00 – 11.00

10.00 – 10.05 Welcome

10.05 – 10.25 Impact evaluation: what is the right approach for me?
Amanda Burke, Senior Research Associate, UEA

10.25 – 10.45 What process evaluation can do for you: a real-life approach
Dr Yannis Pappas, Director of Centre for Health Service Organisation and Delivery, University of Bedfordshire

10.45 – 10.55 Question and Answer Session

10.55 – 11.00 Next Steps
IMPACT EVALUATION: WHAT IS THE RIGHT APPROACH FOR ME?

AMANDA BURKE: SENIOR RESEARCH ASSOCIATE, UEA
Impact evaluation:
What difference has it made?

Process evaluation
What can be learned from the way it was delivered?

Evaluation
The systematic assessment of an initiative, policy, or service.
THIS SESSION WILL GIVE AN OVERVIEW OF

- Selecting impact measures
- Quantitative methods
- Levels of evidence and ‘attribution’
- Other consideration and resources for further reading
WHAT WILL I BE MEASURING?

1. Draw up a logic model with stakeholders to identify outcomes
2. Consider which outcomes you might measure, when, and how
3. Don’t forget potentially negative outcomes
DATA COLLECTION METHODS

Impact evaluation normally involves quantitative data, which can be (has the potential to be) numerically analyzed.

<table>
<thead>
<tr>
<th>Methods</th>
<th>Example</th>
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<tbody>
<tr>
<td>Self-report (survey/structured interview)</td>
<td>Mental wellbeing</td>
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<td>Counts</td>
<td>COVID-19 vaccine uptake</td>
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<td>Objective measures</td>
<td>Reduction in weight</td>
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<td>Assessment data</td>
<td>School attainment</td>
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<td>Structured observation</td>
<td>Tracking and timing</td>
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ASSESSING ‘DIFFERENCE’

Assess difference through **comparison**, for example:

- Over time
- Between groups
- Between those receiving the intervention and those not receiving the intervention
- Between those receiving different levels of an intervention

Comparisons may be to evidence ‘causality’, or ‘attribution’.

Impact evaluation: What difference has it made?
A USEFUL WAY OF LOOKING AT LEVELS OF EVIDENCE

STANDARDS OF EVIDENCE:
AN APPROACH THAT BALANCES THE NEED FOR EVIDENCE WITH INNOVATION

October 2013, Ruth Patnick and Joe Ludlow

Level 1
You can describe what you do and why it matters, logically, coherently and convincingly

Level 2
You capture data that shows positive change, but you cannot confirm you caused this

Level 3
You can demonstrate causality using a control or comparison group

Level 4
You have one or independent replication evaluations that confirms these conclusions

Level 5
You have manuals, systems and procedures to ensure consistent replication and positive impact
Guidance

What Works Network

The What Works Network uses evidence to improve the design and delivery of public services.

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<tr>
<th>College of Policing What Works Centre for Crime Reduction</th>
<th>Crime reduction</th>
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<tr>
<td>Early Intervention Foundation</td>
<td>Early intervention</td>
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<td>What Works Centre for Local Economic Growth (hosted by LSE, Arup, Centre for Cities)</td>
<td>Local economic growth</td>
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<td>Centre for Ageing Better</td>
<td>Improving quality of life for older people</td>
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<td>What Works Centre for Wellbeing</td>
<td>Wellbeing</td>
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<td>Centre for Homelessness Impact</td>
<td>Homelessness</td>
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QUASI-EXPERIMENTAL METHODS

- **Comparison groups (alternatives to RCT to provide a counter-factual):**
  - Membership of the control and intervention not randomized e.g., wait-list control
  - Regression discontinuity compares cases either side of allocation at a natural ‘cut off’ e.g., a school assessment score
  - Matching can improve the ‘baseline equivalence’ of groups

- **Change over time:**
  - Pre-post intervention change
  - Many measurements (interrupted time series)
EXAMPLES

- Older people in care homes waiting for a sports intervention are wait-list controls.
- A physical activity intervention compares ‘standard’ or ‘enhanced’ intervention areas.
- Routine administrative data is used to identify difference in uptake and assessment scores in two counties, one doing the ‘pre-school review’ at 2 years, one at 3 years.
- Pupils in schools waiting for a wellbeing intervention are wait-list controls.

Research in the real world: In the last example, the wait-list controls were abandoned due to COVID-19. Alternative: contextualizing any pre-post change using a national dataset (weighted to the profile of our dataset). Also exploring to what degree schools’ engagement with the intervention is associated with change.
10 reasons not to evaluate your program

Magenta Book
Central Government guidance on evaluation

RESOURCES
Grosvenor: 10 reasons not to evaluate LINK
HM Treasury: Magenta Book LINK
Midlands DSC: Guide LINK
OTHER THINGS TO CONSIDER / READ UP ON

- Is my sample size adequate? Can use rule of thumb /online calculator/statistician.
- What is the best way of collecting data from my population of interest (accessibility)?
- Is the intervention increasing health inequalities?
- Should I use validated measures in my survey (online resources exist e.g. CORC)?
- How do I adopt open, reproducible research practice e.g doing an analysis plan ahead of time, sharing data, working with others. ([UK Reproducibility Network](#))
- Ethics and data protection/management
- Project management and governance
‘GOOD’ EVALUATION

Adapted from the Government’s ‘Magenta Book’

**Useful:** Usable outputs at the right point in time

**Credible:** Transparent, independent (if possible), limitations explained

**Robust:** Appropriate methods are selected, and the evaluation is well executed

**Proportionate:** A low-risk, well-evidence intervention may only require light-touch evaluation and/or monitoring (and vice-versa)
THANK YOU
What process evaluation can do for you: a real-life approach.

Dr Yannis Pappas
Director of Centre for Health Service Organisation and Delivery, University of Bedfordshire

Head of Faculty, Research and Knowledge Exchange
Faculty BHSCA
Introductions

- Director, Research Centre for Health Service Organisation and Delivery
- Reader (Associate Professor) in Health Service Organisation and Delivery
- Head of PhD School, Institute for Health Research

Externally:
- Expert evaluator for the European Commission (EIT Health)
- Editorial Board Biomed Central
- Head Research a Exchange and Knowledge Exchange Faculty in BHSCA
- NIHR and other NHS Advisory Boards
- Trained Academic GPs with the London Deanery
- Other academic and clinical committees
A definition

Evaluation research is the systematic assessment of the worth or merit of time, money, effort and resources spent in order to achieve a goal.
A real-life guide to evaluation...
A wide audience is watching

Funders, donors, local and central government, senior management, client/user-groups, auditors, regulatory bodies, the media, staff...
Most importantly...

An inescapable need to understand ‘what is going on’ in your organisation and whether the plans you are making and interventions you are delivering are worth keeping as they are, discard them or improve them.
Where are you in the divide?

**Worst case scenario**
- Interventions are decided top down
- Designed around weak evidence
- Informed by personal agendas rather than national priorities
- Users are not consulted

**Best case scenario**
- Interventions are designed bottom up, informed by strong evidence and following a consultation with users and the extensive network of providers.
Impact and Process evaluation

• **Impact evaluation**

To assess whether an intervention is effective in changing user outcomes (health & behaviour) as well as affecting efficient use of resources.

• **Process evaluation**

Understand barriers and facilitators for change (communication, organisational readiness, support mechanisms, IT...).
What’s Impact Evaluation? Mandy’s the expert!
What is process evaluation?

• Process evaluation allows an organisation to look at how it develops itself, its structures, its supporting programs like communications and marketing, and even fund development to get to the outcomes they want to achieve.

• Qualitative methods (interviews, focus groups, large group discussions) but also surveys to explore what may be affecting the implementation of an intervention.

• Matters of accessibility, usability, utility may come up too.
An evaluation snapshot

**SUMMATIVE EVALUATION**

- Costs & Health economics
- Health outcomes

**IMPACT EVALUATION**

**PROCESS EVALUATION**

- Patient, carer and practitioner perspectives
- Strategy and Implementation
- Formative evaluation

**SUMMATIVE EVALUATION**

**FORMATIVE EVALUATION**

- Feedback mechanisms and quality improvement
Evaluation anxiety

‘Does it mean that something is wrong with my programme’?
There was nothing wrong with the Ford Cortina...
Striving for constant progress means efficiency, performance, safety and increased usability and user satisfaction.
You need someone to do it

• Funding may be necessary
  - funding is available from a number of sources
• Some sort of resource is certainly necessary
  - resources available locally
• Highly specialised and skilled people available
  - local Universities may be a good place to start
• The Research Centre for Health Service Organisation and Delivery and the Institute for Health Research in the University of Bedfordshire capitalises on local, national and international opportunities for collaborative interdisciplinary cross-boundary research and innovation in health.

• yannis.pappas@beds.ac.uk
• https://www.beds.ac.uk/research-ref/ihr/rchod
SOME OF OUR FUNDERS
CURRENT OPPORTUNITIES

Matched funding available for PhD in Service Evaluation
Thank you

yannis.pappas@beds.ac.uk
An evaluation is just the beginning

- Strategy and implementation
- Improve and/or sustain health outcomes
- Service use and economic impact
- User involvement and staff buy-in
Upcoming Events
Upcoming Events

Webinars

We are running a series of monthly webinars on a variety of evaluation topics.

Next Evaluation Working Group Webinar:

Sharing Findings to Make an Impact
June 28th 2022: 10 – 11am

Professor Wendy Wills, University of Hertfordshire
Amander Wellings, PPI Co-Applicant NIHR PHIRST

Evaluation ‘Drop-In’ Clinic

Do you have a question or challenge about an evaluation you are planning that you like to discuss with an expert?

Book a time to meet with Professor Andy Jones, Public Health Expert Advisor, Norfolk County Council for advice and guidance on the next steps for your evaluation.

This could be help in defining your research question through to advanced evaluation techniques for complex evaluations, all are welcome – no question too big or small!

Next clinic date to be announced soon.